AMENDMENTS IN THE CLAIMS

1.   (currently amended) A method ~~for dynamically updating a thermal profile of a processor of a data processing system,~~ comprising:

allocating a memory location within a flash module of a data processing system to storing a patch file with thermal profile data for a processor of the data processing system;

modifying an advance configuration program interface/advanced power management (ACPI/APM) code of said data processing system to dynamically read said thermal profile from [[a]] the patch file and update an associated temperature control function;

associating ~~data of~~ said thermal profile data within a BIOS of said data processing system via a FLASH utility, wherein said BIOS operates with the thermal profile data taken from said patch file.

2.   (currently amended) The method of Claim 1, further comprising:

providing thermal profile data within said patch file about an installed processor of said data processing system;

enabling dynamic updates of the thermal profile data and the BIOS via a new patch file stored within the memory location.

3.   (currently amended) The method of Claim 2, wherein said thermal profile data includes at least one of a first temperature at which fans of said system will engage, a second temperature at which temperatures thermal throttling will be utilized, and a third temperature at which said processor shuts down, said method further comprising dynamically controlling temperature control utility of said data processing system to respond according to said data.

4.   (currently amended) The method of Claim 3, further comprising:

executing a power-on self test (POST) operation for said data processing system;

comparing a processor ID with an ID associated with said patch file; and

when said processor ID matches said ID of said patch file, also comparing a revision level of said processor with a revision level provided within said patch file.

5.   (canceled)

6.   (currently amended)   The method of Claim [[5]] 4, wherein:

responsive to said revision level of said processor matching said revision level provided within said patch file, completing said POST and operating said data processing system with thermal profiles of said patch file; and

when said revision level of said processor does not match said revision level provided within said patch file, prompting a user of said data processing system for a correct patch file for said processor.

7.   (canceled)

8.   (currently amended)   The method of Claim [[7]] 6, wherein:

said prompting step includes providing within the prompt a description of a correct processor ID and revision level of the required patch file to said user during said prompting step.

9.   (currently amended)   The method of Claim 8, wherein, when a patch file having a correct thermal solution is not provided for said processor, said method comprises initiating operations of operating said data processing system utilizing a pre-established threshold level for operation of said temperature controls, wherein said threshold level corresponds to a minimum level above which adequate cooling is applied to any processor by said BIOS, irrespective of said processor's actual recommended cooling requirements.

10.   (currently amended)   A data processing system for providing updated thermal profiles for a processor of a data processing system that supports interchangeable processors, said system comprising:

a processor;

a flash module having a memory location that is independently updateable via a patch file and is reserved for storing operating parameters for components within the data processing system;

a modified advance configuration program interface/advanced power management (ACPI/APM) code ~~of said data processing system~~ that dynamically reads said <u>operating parameters</u> ~~thermal profile~~ from a <u>the</u> patch file ~~within a flash module of said data processing system~~ and updates an associated ~~temperature control~~ function <u>of the corresponding components</u>;

<u>a basic input/output system (BIOS); and</u>

means for associating ~~data of said thermal profile~~ <u>said operating parameters</u> with a BIOS of said data processing system via a FLASH utility.

11. (currently amended) The <u>data processing</u> system of Claim 10, <u>wherein said operating parameters includes a thermal profile of the processor and said data processing system</u> further comprising means for providing thermal data within said patch file about said processor. ~~of said data processing system;~~

12. (currently amended) The <u>data processing</u> system of Claim 11, wherein said data includes a first temperature at which fans of said system will engage, a second temperature at which temperatures thermal throttling will be utilized, and a third temperature at which said processor shuts down, said <u>data processing</u> system further comprising<u>:</u>

<u>a temperature control utility; and</u>

means for ~~dynamically controlling~~ <u>enabling the</u> temperature control utility ~~of said data processing system~~ to respond according to said <u>thermal</u> data.

13. (currently amended) The <u>data processing</u> system of Claim 12, further comprising:

means for executing a power-on self test (POST) operation for said data processing system; <u>and</u>

means for comparing a processor ID with an ID associated with said patch file.

14. (currently amended) The <u>data processing</u> system of Claim 13, <u>further comprising means</u> ~~wherein~~, when said processor ID matches said ID of said patch file, ~~said system comprises means~~ for comparing a revision level of said processor with a revision level provided within said patch file.

15.   (currently amended) The data processing system of Claim 14, further comprising
wherein:

means, responsive to said revision level of said processor matching said revision level
provided within said patch file, for completing said POST and operating said data processing
system with thermal profiles of said patch file; and

means, when said revision level of said processor does not match said revision level
provided within said patch file, for prompting a user of said data processing system for a correct
patch file for said processor.

16.   (currently amended) The data processing system of Claim [[15]] 14, further comprising
means for prompting a user of said data processing system for a correct patch file for said
processor when said processor ID does not match said ID of said patch file.

17.   (currently amended) The data processing system of Claim 16, wherein said means for
prompting means includes means for providing at least a description of a correct processor ID
and revision level to said user within a prompt during said prompting step.

18.   (currently amended) The data processing system of Claim 17, wherein, when a correct
thermal solution is not provided for said processor, said data processing system comprises means
for operating said data processing system utilizing a pre-determined threshold level for operation
of said temperature controls, wherein said threshold level corresponds to a minimum level above
which adequate cooling is applied to any processor by said BIOS irrespective of said processor's
recommended cooling requirements.

19.   (currently amended) A data processing system, comprising:

a flash module having a section memory block reserved for storing temperature control
parameters of selected components of the data processing system, said memory block being
independently updateable via a patch file;

means for flashing a BIOS into said flash module; and

means for subsequently flashing temperature control parameters from a patch file into
said section of said flash module without deleting said BIOS, wherein said BIOS is associated

with said parameters to provide efficient operation of the selected components of said data processing system.

20.   (currently amended)   The flash module data processing system of Claim 19, wherein said parameters includes temperature related parameters, said data processing system further comprising means for controlling a temperature of a processor of said data processing system utilizing said BIOS and said associated parameters within said section memory block of said flash module;.

21.   (currently amended)   A computer program product for updating a temperature profile of a processor of a data processing system, comprising:

a computer readable medium; and

program code on said computer readable medium for:

dynamically updating a temperature profile of said a processor within a flash module of said a data processing system; and

triggering an alert to alerting a POST operation when a correct temperature profile file is provided within said program code.

22.   (original) The computer program product of Claim 21, wherein further said program code comprises a file ID corresponding to a processor ID and a revision level indicator, wherein further said program code automatically installs data corresponding to said temperature profile into a flash module of said data processing system when said file ID matches a processor ID of a processor being utilized within said data processing system and said revision level matches a revision level of said processor.

23.   (newly added) The data processing system of Claim 20, further comprising means for receiving and inputting said data of said flash file from a user provided medium into the memory block of said flash module.

24.   (newly added) The data processing system of Claim 20, wherein said temperature related parameters includes one or more of a first temperature at which fans of said system will engage,

a second temperature at which temperatures thermal throttling will be utilized, and a third temperature at which said processor shuts down.